

- (b) contacting the nematode worms with a chemical substance;
 - (c) detecting a signal indicating phenotypic, physiological, behavioral, or biochemical changes in the nematode worms using non-visual detection means;
- wherein step (a) is performed in a multi-well plate with liquid assay medium containing a water soluble polymer at a concentration sufficient to increase the viscosity of the medium;
- wherein the water soluble polymer is medium viscosity carboxymethyl cellulose.

39. (thrice amended) The method as claimed in claim 38 wherein the concentration of water soluble polymer in the liquid medium is 0.3%.

40. (four times amended) A method of identifying chemical substances which have potential pharmacological activity using nematode worms, which method comprises the steps of:

- (a) dispensing substantially equal numbers of nematode worms into each of the wells of a multi-well assay plate;
 - (b) contacting the nematode worms with a chemical substance;
 - (c) detecting a signal indicating phenotypic, physiological, behavioral, or biochemical changes in the nematode worms using non-visual detection means;
- wherein step (a) is performed in a multi-well plate with liquid assay medium containing a water soluble polymer at a concentration sufficient to prevent the nematode worms from sticking to the wells of the multi-well plate.

41. (thrice amended) The method as claimed in claim 40 wherein the water soluble polymer is polyethylene glycol, polyvinyl alcohol, or polyvinylpyrrolidone.

211. (amended) The method as claimed in claim 210 wherein the water soluble polymer is polyethylene glycol, polyvinyl alcohol, or polyvinylpyrrolidone.